

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	David H. HANES	§	Confirmation No.:	6734
		§		
Serial No.:	10/753,251	§	Group Art Unit:	2481
		§		
Filed:	01/08/2004	§	Examiner:	O. Adegeye
		§		
For:	System, Method And	§	Docket No.:	100203960-1
	Computer-Readable	§		82090694
	Medium For Analyzing	§		
	An MPEG-Formatted File	§		

**APPEAL BRIEF**

**Mail Stop Appeal Brief – Patents**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Date: September 20, 2011

Sir:

Appellant hereby submits this Appeal Brief in connection with the above-identified application. A Notice of Appeal was electronically filed on July 20, 2011.

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**I. REAL PARTY IN INTEREST**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, Texas, 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

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**II. RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any related appeals or interferences.

**III. STATUS OF THE CLAIMS**

Originally filed claims: 1-24.  
Claim cancellations: 15.  
Added claims: 25-27.  
Presently pending claims: 1-14 and 16-27.  
Presently appealed claims: 1-14 and 16-27.

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**IV. STATUS OF THE AMENDMENTS**

No claims were amended after the final Office action dated June 15, 2011.

## V. SUMMARY OF THE CLAIMED SUBJECT MATTER

This section provides a concise explanation of the subject matter defined in each of the independent claims, referring to the specification by page and line number or to the drawings by reference characters as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified with a corresponding reference to the specification or drawings where applicable. The specification references are made to the application as filed by Appellant. Note that the citation to passages in the specification or drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element. Also note that these specific references are not exclusive; there may be additional support for the subject matter elsewhere in the specification and drawings.

Some embodiments are directed to a method as in claim 1:

1. A method of analyzing a moving pictures expert group (MPEG)-formatted video/audio file, comprising:

retrieving,<sup>1</sup> by a processing element, a rule set that includes an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-capable decoder;<sup>2</sup>

reading, by the processing element, a portion of the file;<sup>3</sup>

comparing, by the processing element, the portion of the file with the MPEG and compatibility rules contained in the rule set, the rule set not contained in said file;<sup>4</sup>

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<sup>1</sup> Fig. 6 (310). Disclosure page 10, line 5 of paragraph 33.

<sup>2</sup> Disclosure page 8, line 6 of paragraph 28 through line 14 of paragraph 29.

<sup>3</sup> Fig. 6 (320). Disclosure page 10, line 6 of paragraph 33.

<sup>4</sup> Disclosure page 6, line 5 of paragraph 23.

based on said comparing the portion of the file with the MPEG and compatibility rules, determining, by the processing element, whether the file violates any of the MPEG and compatibility rules contained in the rule set;<sup>5</sup> and

as a result of determining that the file violates any of the MPEG and compatibility rules, performing, by the processing element, at least one of transcoding the file and alerting a user as to the violation.<sup>6</sup>

Some embodiments are directed to a system as in claim 10:

10. A system for analyzing a moving pictures expert group (MPEG)-formatted file, comprising:

a format analysis application;<sup>7</sup> and

a processing element<sup>8</sup> operable to execute the application, the application reading<sup>9</sup> a rule set that includes an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-capable decoder;<sup>10</sup>

wherein the application is configured to compare the file to the rules<sup>11</sup> and to transcode the file based upon a determination that the file violates at least one of the rules.<sup>12</sup>

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<sup>5</sup> Fig. 6 (325). Disclosure page 10, line 9 of paragraph 33.

<sup>6</sup> Disclosure page 8, line 4 of paragraph 28.

<sup>7</sup> Fig. 3 (122). Disclosure page 5, line 3 of paragraph 21.

<sup>8</sup> Fig. 3 (130). Disclosure page 5, line 5 of paragraph 21.

<sup>9</sup> Fig. 6 (310). Disclosure page 10, line 5 of paragraph 33.

<sup>10</sup> Disclosure page 8, line 6 of paragraph 28 through line 14 of paragraph 29.

<sup>11</sup> Disclosure page 6, line 5 of paragraph 23.

<sup>12</sup> Disclosure page 8, line 4 of paragraph 28.



Some embodiments are directed to a computer-readable memory unit as in claim 18:

18. A computer-readable memory unit<sup>13</sup> having stored thereon an instruction set<sup>14</sup> to be executed, the instruction set, when executed by a processor, causes the processor to:

read a rule set<sup>15</sup> that includes an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-capable decoder;<sup>16</sup>

read a portion of the MPEG-formatted file;<sup>17</sup>

compare the portion with the rule set;<sup>18</sup>

based on said comparison of the portion of the file with the MPEG and compatibility rules, determine whether the portion violates any of the rules in the rule set;<sup>19</sup> and

as a result of a determination that the file violates any of the MPEG and compatibility rules, perform at least one of transcoding the file and alerting a user as to the violation.<sup>20</sup>

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<sup>13</sup> Fig. 3 (40). Disclosure page 5, line 3 of paragraph 21.

<sup>14</sup> Fig. 3 (122). Disclosure page 5, line 3 of paragraph 21.

<sup>15</sup> Fig. 6 (310). Disclosure page 10, line 5 of paragraph 33.

<sup>16</sup> Disclosure page 8, line 6 of paragraph 28 through line 14 of paragraph 29.

<sup>17</sup> Fig. 6 (320). Disclosure page 10, line 6 of paragraph 33.

<sup>18</sup> Disclosure page 6, line 5 of paragraph 23.

<sup>19</sup> Fig. 6 (325). Disclosure page 10, line 9 of paragraph 33.

<sup>20</sup> Disclosure page 8, line 4 of paragraph 28.

Some embodiments are directed to a system as in claim 25:

25. A system for analyzing a moving pictures expert group (MPEG)-formatted file, comprising:

a format analysis application;<sup>21</sup> and

a processing element<sup>22</sup> operable to execute the application, the application reading a rule<sup>23</sup> having at least one logical instruction defining a digital versatile disc (DVD) format requirement,<sup>24</sup> the rule specifying a particular portion of the file to be tested by the rule, and the application comparing the specified portion of the file with the rule,<sup>25</sup> the application making a determination of validity of the file with the DVD format dependent upon a result of the comparison;<sup>26</sup>

wherein the rule specifies whether the file must have a group of pictures (GOP) header;<sup>27</sup> and

wherein, upon making a determination that the file is invalid, the processor element transcodes the file.<sup>28</sup>

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<sup>21</sup> Fig. 3 (122). Disclosure page 5, line 3 of paragraph 21.

<sup>22</sup> Fig. 3 (130). Disclosure page 5, line 5 of paragraph 21.

<sup>23</sup> Fig. 6 (310). Disclosure page 10, line 5 of paragraph 33.

<sup>24</sup> Disclosure page 8, line 6 of paragraph 28 through line 14 of paragraph 29.

<sup>25</sup> Disclosure page 6, line 5 of paragraph 23.

<sup>26</sup> Fig. 6 (325). Disclosure page 10, line 9 of paragraph 33.

<sup>27</sup> Disclosure page 8, line 4 of paragraph 29.

<sup>28</sup> Disclosure page 8, line 4 of paragraph 28.

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 18-24 are directed to non-statutory subject matter.

Whether claims 1-27 are anticipated by Kitamura (U.S. Pat. No. 7,236,526, hereinafter "Kitamura").

## **VII. ARGUMENT**

### **A. Non-statutory subject matter rejection of claims 18-24**

Claim 18 is directed to a computer-readable “memory unit.” The Examiner alleges that “memory unit” can reasonably be interpreted as a “transitory propagating signal.” Final Office Action pages 3-4. The Examiner’s interpretation is unreasonable because claims are to be construed in light of the specification, and Appellant’s specification which says nothing of signals as being a type of computer-readable memory unit. Appellant’s specification explains that a file analysis application is “stored in a memory unit 40.” Disclosure page 5, paragraph 21. Moreover, Appellant contends that one of ordinary skill in the art would not consider a propagating signal to equate to a “memory unit.” One of ordinary skill in the art might say that a propagating signal can “encode” information to be transmitted from one point to another. But, a signal itself would not be considered to be a memory unit.

For at least these reasons, the Examiner erred in rejecting claims 18-24 under § 101.

### **B. Anticipation rejection of claims 1-27**

#### **1. Overview of Kitamura**

Kitamura addresses the problem of sequentially encoding and decoding a video file. Using a compression type of encoding technique leads to a degradation of the picture quality which is exacerbated with each subsequent decoding/encoding of the file. See cols 1-2. Kitamura addresses the problem by embedding in the video file being encoded encoding parameters that were previously generated and used to encode the file. Thus, the history of the encoding parameters generated for use by the various sequential encoders is carried forward with the file. See col. 17, lines 44-59. When the file is to be encoded anew, the current encoder decides whether to use for the new encoding process the previously generated encoding parameters embedded in the video file, or whether to generate a new set of encoding parameters. See col. 21, lines 42-57.

Kitamura explains that, for an encoder, an operator specifies the type for each picture to be encoded by that encoder (I frame, P frame, B frame). The specification by the operator as to picture type is in the form of a GOP header. Col. 21, lines 14-23. Kitamura further explains that the determination by each encoder as to which encoding parameters to use is based on “whether or not the picture type of the reference picture determined from the GOP structure specified by the operator is the same as the picture type contained in the history information. That is, it determines whether or not the reference picture has ever been encoded into the picture type that is the same as the specified one.” Col. 21, lines 29-35.

## **2. Claims 1-9**

Appellant’s claimed subject matter relates to a much different problem than that addressed by Kitamura. Appellant’s specification explains that incompatibility problems can prevent playback of encoded video files. For example, the DVD format requires a GOP header but the GOP header may be optional in an MPEG encoded file. Thus, burning an MPEG file to a DVD for playback by a DVD player may not work. Pages 6-7. Other incompatibility examples are identified as well in the specification. Such incompatibility problems are not at all the subject of Kitamura. Kitamura is only concerned with encoding a previously encoded file so as to minimize picture quality degradation. Appellant’s claims focus on the differences between Kitamura and Appellant’s contribution.

Claim 1, for example, requires comparing a portion of a file with a rule set that is not contained in the file itself. To the extent Kitamura teaches anything that could be remotely considered related to a rule set contained outside the audio/video file being evaluated, it would have to be operator-specified picture type as noted above. An operator specifies for an encoder the type of pictures to be encoded by that encoder. A picture type (I frame, P frame, etc.) is not a “rule set” and certainly not a rule set that comprises “an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-

capable decoder.” A picture type is simply that, a type. A picture type would not reasonably be considered by one of ordinary skill in the art to be a rule or set of rules. At any rate, the Examiner has stated that Kitamura’s sequence\_header and group\_of\_picture header are akin to the rules/rule sets. The headers to which the Examiner refers are contained in the file being evaluated, and thus do not match up to the rule set requirement that they are not contained in the file.

In the Final Office Action, the Examiner also alleges that the claimed MPEG and compatibility rules equate to “the steps taken during a transcoding process where the device checks the past history to see whether the picture type referenced is different or the same and based on the outcome, a process is carried out.” Final Office Action page 2. However, the steps in Kitamura to which the Examiner referred to use information contained in the file itself and are not “rule sets” as noted above.

Claim 1 also requires that “as a result of determining that the file violates any of the MPEG and compatibility rules, performing, by the processing element, at least one of transcoding the file and alerting a user as to the violation.” Thus, either a user is alerted or the file is transcoded based upon a rule violation occurring. Transcoding is defined in the specification as decoding and then re-encoding the file. See para. 25. Kitamura has no teaching of alerting a user to the occurrence of a rule violation or transcoding the file based on the occurrence of a rule violation. Regarding dependent claim 9 which requires transcoding the file, the Examiner pointed to cols. 17, 20, and 21 in Kitamura but such passages simply refer to decoding and encoding of a file. Such transcoding is not described as being performed “as a result of determining that the file violates any of the MPEG and compatibility rules.”

For at least these reasons, claim 1 and its dependent claims are in condition for allowance.

### **3. Claim 8**

Dependent claim 8 requires determining whether the portion of the file comprises a GOP header. The Examiner pointed to cols. 17, 20 and 21 of Kitamura which do refer to a GOP header, but not as being used in the method of

claim 8. In claim 8, the transcoding the file or alerting the user occurs "upon determining that a GOP header is not present in the file." In Kitamura, the decision as to whether to the transcode the file has nothing to do with the presence or absence of a GOP header. The GOP header may somehow factor in the transcoding process, but its presence or absence does not dictate whether transcoding is to occur.

#### **4. Claims 10-27**

Claim 10 specifies that the "application is configured to compare the file to the rules and to transcode the file based upon a determination that the file violates at least one of the rules." As explained above, Kitamura transcodes files but the decision to do so has nothing to do with the whether a rule violation has occurred. For at least these reasons, claim 10 and its dependent claims are in condition for allowance. The same or similar reason applies to independent claims 18 and 25 and their dependent claims as well.

#### **C. Conclusion**

For the reasons stated above, Appellant respectfully submits that the Examiner erred in rejecting all pending claims. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

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**VIII. CLAIMS APPENDIX**

1. A method of analyzing a moving pictures expert group (MPEG)-formatted video/audio file, comprising:

retrieving, by a processing element, a rule set that includes an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-capable decoder;

reading, by the processing element, a portion of the file;

comparing, by the processing element, the portion of the file with the MPEG and compatibility rules contained in the rule set, the rule set not contained in said file;

based on said comparing the portion of the file with the MPEG and compatibility rules, determining, by the processing element, whether the file violates any of the MPEG and compatibility rules contained in the rule set; and

as a result of determining that the file violates any of the MPEG and compatibility rules, performing, by the processing element, at least one of transcoding the file and alerting a user as to the violation.

2. The method according to claim 1, wherein the MPEG rule comprises a parameter for addressing the portion of the file.



3. The method according to claim 2, wherein the parameter specifies a bit rate of the file.

4. The method according to claim 1, wherein at least one of the rules comprises at least one parameter logically defining a standardized format requirement.

5. The method according to claim 1, wherein at least one of the rules comprises at least one parameter logically defining a MPEG format requirement.

6. The method according to claim 1, wherein the compatibility rule comprises at least one parameter logically defining a digital versatile disc (DVD) format requirement.

7. The method according to claim 1, wherein reading a portion of the file comprises locating a sequence header of the file.

8. The method according to claim 1, wherein comparing the portion of the file comprises determining whether the file comprises a group of pictures (GOP) header, and wherein performing at least one of transcoding and alerting occurs based upon determining that a GOP header is not present in the file.

9. The method according to claim 1, wherein performing at least one of transcoding and alerting comprises transcoding the file based upon determining the file violates any of the rules.

10. A system for analyzing a moving pictures expert group (MPEG)-formatted file, comprising:

a format analysis application; and

a processing element operable to execute the application, the application reading a rule set that includes an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-capable decoder;

wherein the application is configured to compare the file to the rules and to transcode the file based upon a determination that the file violates at least one of the rules.

11. The system according to claim 10, wherein at least one of the rules defines a moving pictures expert group (MPEG) format requirement.

12. The system according to claim 10, wherein the compatibility rule comprises defines a digital versatile disc (DVD) format requirement.

13. The system according to claim 10, wherein the application is adapted to compare a bit rate of the file with the MPEG rule.

14. The system according to claim 10, wherein the compatibility rule specifies whether the file must comprise a group of pictures (GOP) header.

16. The system according to claim 10, wherein the application is adapted to read the file to determine a location of a sequence header of the file.

17. The system according to claim 10, wherein the application is adapted to determine whether the file comprises a group of pictures disposed between a sequence start code and a sequence end code of the file.

18. A computer-readable memory unit having stored thereon an instruction set to be executed, the instruction set, when executed by a processor, causes the processor to:

read a rule set that includes an MPEG rule and a compatibility rule, said MPEG rule defining a format requirement for the file to be decoded by a first type of MPEG-capable decoder, and the compatibility rule defining a format requirement for the file to be decoded by a second type of MPEG-capable decoder;

read a portion of the MPEG-formatted file;

compare the portion with the rule set;

based on said comparison of the portion of the file with the MPEG and compatibility rules, determine whether the portion violates any of the rules in the rule set; and

as a result of a determination that the file violates any of the MPEG and compatibility rules, perform at least one of transcoding the file and alerting a user as to the violation.

19. The computer-readable memory unit according to claim 18, wherein at least one of the rules defines a MPEG format requirement.

20. The computer-readable memory unit according to claim 18, wherein the compatibility rule logically defines a digital versatile disc (DVD) format requirement.

21. The computer-readable memory unit according to claim 18, wherein the instruction set, when executed by the processor, causes the processor to determine whether the file comprises a group of pictures (GOP) header.

22. The computer-readable memory unit according to claim 18, wherein the instruction set, when executed by the processor, causes the processor to locate a sequence header of the file.

23. The computer readable memory unit according to claim 14, instruction set, when executed by the processor, causes the processor to transcode the file if the file violates at least one of the rules in the rule set.

24. The computer-readable memory unit according to claim 18, wherein the instruction set, when executed by the processor, causes the processor to determine whether the file comprises a group of pictures disposed between a sequence start code and a sequence end code of the file.

25. A system for analyzing a moving pictures expert group (MPEG)-formatted file, comprising:

a format analysis application; and

a processing element operable to execute the application, the application reading a rule having at least one logical instruction defining a digital versatile disc (DVD) format requirement, the rule specifying a particular portion of the file to be tested by the rule, and the application comparing the specified portion of the file with the rule, the application making a determination of validity of the file with the DVD format dependent upon a result of the comparison;

wherein the rule specifies whether the file must have a group of pictures (GOP) header; and

wherein, upon making a determination that the file is invalid, the processor element transcodes the file.

26. The system of Claim 25, wherein the application is configured to transcode the file to comply with the rule in response to a determination that the specified portion of the file violates the rule.

27. The method of claim 1 wherein:

the MPEG rule specifies a maximum bit rate value and a location within a sequence header of the file at which a bit rate encoded in the file is located, and

the compatibility rule specifies that a GOP header must be present in the file.

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**IX. EVIDENCE APPENDIX**

None.

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**X. RELATED PROCEEDINGS APPENDIX**

None.